



### Phase 1 pioneering

Astronaut Shannon Lucid begins a new era in the space station program. Story on Page 3.



#### Many thanks

STS-75 Commander Andy Allen sends his thanks for the support of JSC workers. Letter on Page 4.

# Space News Roundup

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JSC photo by Mark So

JSC Director George Abbey, right, greets Commander Andy Allen and other crew members on their return to Ellington Field last Saturday. The STS-75 crew spent 15 days on board *Columbia* conducting a variety of scientific experiments that will be shared by an international team of scientists.

## Columbia's crew returns home praising ground support teams

By Karen Schmidt

Columbia ended its 16-day mission at 7:58 a.m. CST last Saturday returning to Kennedy Space Center with a cache of scientific data for researchers around the world.

"You have written a page in the history of Italy that will never be forgotten." said The Honorable Sabastino Salvatori, Consul General of Italy in Houston. "We are very proud of you. Thanks to this marvelous nation of America that is so generous and hospitable to allow cherished dreams to come true."

With a bonus day in space, researchers working with the United

States Microgravity Payload collected more than their anticipated data on fire-related phenomena and materials processing, and the Tethered Satellite team gained knowledge to shape the future of tethered satellites in space.

The STS-75 crew—Commander Andy Allen, Pilot Scott Horowitz, Mission Specialists Jeff Hoffman, Maurizio Cheli, Claude Nicollier and Franklin Chang-Diaz and Payload Specialist Umberto Guidoni—returned to Houston about 10 hours after landing with praise for their team mates, both in orbit and on the ground.

"Sometimes you learn more by things that go wrong than by things that you expect," Allen said. He added that the ground team was extraordinary when faced with a difficult situation. "When things go a little bit different than what we had planned, they come up with some ideas that are phenomenal, and it makes me think of the NASA of old where they just take the challenge on to make these things work."

Rookie space flyer Horowitz was overwhelmed by the experience.

"It takes thousands and thousands of people to make the space shuttle

# Atlantis set for third shuttle, Mir docking mission

By James Hartsfield

Only about a day after *Columbia* was towed from Kennedy Space Center's runway following its 15-day flight on STS-75, shuttle managers set Thursday as the official launch date for *Atlantis* on STS-76, the third shuttle-Mir docking mission.

The STS-76 crew—Commander Kevin Chilton, Pilot Rick Searfoss and Mission Specialists Rich Clifford, Linda Godwin, Ron Sega and Shannon Lucid—will fly to KSC Sunday evening in preparation for the launch.

Following Atlantis' docking with Mir on Day three of the mission, Lucid will become a member of the Mir-21 crew, planning to spend 140 days aloft aboard the Russian Mir station. Atlantis will also bring fresh supplies to Mir, including an expected 1,400 pounds of water and 3,700 pounds of equipment. The equipment ranges from a vast

amount of scientific experiment equipment and station logistics such as a Russian gyrodyne and three storage batteries.

In addition, Godwin and Clifford will perform the first space walk ever during a shuttle-Mir docking on the sixth day of STS-76. The two space walkers will exit Atlantis' airlock during the time the two spacecraft are docked to deploy an experiment package that will characterize the station's exterior environment over the coming months. The Mir Environmental Effects Payload, as the experiments are called, will pave the way for engineers to better assess the environment anticipated for the International Space Station. The space walk itself will blaze a trail toward the International Space Station as well, with Godwin and Clifford wearing the Simplified Aid For EVA Rescue, or SAFER, self-rescue backpack for its first operational use in orbit. SAFER, designed specifically for times when the shuttle is docked to a space station, is used only in the event a space walker drifts free and must fly back to the spacecraft.

Aboard Mir awaiting Lucid's arrival are Mir 21 Commander Yuri Onufriyenko and Flight Engineer Yuri Usachev. The two were launched aboard a Soyuz craft on Feb. 21.

An on-time launch for *Atlantis* at

2:35 a.m. CST Thursday would lead to a landing at about 6:54 a.m. CST March 30. The launch countdown will begin at 1 a.m. CST Monday, and there is a seven-minute launch window.

Meanwhile, *Columbia* is now in the Bay 2 shuttle processing hangar at KSC, and preliminary inspections show the oldest

shuttle in excellent condition following STS-75. Technicians reported 96 dings to the thermal protection tiles, a below average number when compared to previous flights. *Columbia*'s cargo bay doors were opened late Tuesday. The United States Micrograviy Payload-3 experiments and the Tethered Satellite System equipment were to begin being removed today.

The payloads will be transported to KSC's Operations and Checkout Bldg. this weekend. *Columbia*'s next flight is planned for late June on STS-78, carrying the Life and Microgravity Sciences payload.

Elsewhere, Endeavour remains on track for a mid-May launch on STS-77, carrying Spacehab-4 and the Spartan-207.

## Employees will soon change payroll options via phone lines

By Deborah Conder

Beginning in June, NASA civil servants will have the opportunity to process certain payroll actions simply by making a telephone call.

The automated system, called Employee Express, was developed by an interagency task force chartered under the Office of Personnel Management.

"Implementation of systems such as Employee Express are helping us to overhaul the way we do business," says Wayne Draper, JSC's Chief Financial Officer. "The idea is to take advantage of developed tech-

nology and utilize it to streamline our processes while providing customer-oriented capabilities. Employee Express will accelerate processing of employee actions. Implementation of Employee Express demonstrates that we're on our way to providing employees with automated customer-service applications."

Employee Express will be implemented in at least two phases for NASA employees. Phase 1 begins this Spring and includes the capability to change federal tax withholding, state tax withholding, direct deposits, voluntary allotments and home address changes.

Phase 2, tentatively scheduled for the Fall of 1996, potentially includes capabilities to modify health benefits, thrift savings plan, savings bonds, combined federal campaign contributions and county or city taxes.

The computer-based system allows access 24 hours a day, 7 days a week by dialing a 1-800 number. This will eliminate the need for employees to complete a form and forward it to the appropriate office for manual processing. After dialing, employees will identify themselves using a Personal Identification Number or PIN. Every employee will be assigned a

Phase 2, tentatively scheduled for the Fall PIN from OPM prior to implementation of

Employee Express.

JSC employees will be hearing more about Employee Express in the weeks to come. "Our plan is to provide employees with enough information and tools prior to implementation so that once we get the system up and running, it will be user-friendly for all," Draper said. Employees will begin seeing flyers, posters and brochures around the center. Training classes also will be provided, so employees will have opportunities to ask questions and find out more about the system.

## Science institutes report now avaliable on Internet

NASA has released its NASA Science Institutes Plan report, following a six-month period of study by the NASA Science Institutes Team and modifications based on public comments.

The NASA Science Institutes concept began May 19, 1995, when NASA Administrator Daniel S. Goldin released results of an internal review conducted by the agency's Zero Base Review Team. The ZBR science recommendations included a proposal that science

"institutes" be formed at many of NASA's centers—including JSC—with goals to strengthen the quality of NASA science, to bind NASA scientists more effectively to the external community and to increase the effectiveness of the links between the external community and NASA's immense engineering and technical resources.

The report is available on the Internet at URL:

http://galaxy.hq.nasa.gov/Institutes /instplan.html



Eileen Collins

### Luncheon features women pilots

The Equal Opportunity Programs Office and the 1996 Women's History Month Committee will host the JSC's Women's History Month observance at 11:30 a.m.-1:30 p.m. March 29, at the Gilruth Center. This year's theme is "Building the Future on the Past: Women in Flight."

The program will feature a panel discussion by four women who have varied experiences in flight-related activities. Panel members include Mildred "Hut" Ferree, a Women's Air Force service pilot, or WASP from World War II; Yvonne Cagle, retired Air Force major and flight surgeon who was deployed during Desert

Shield; Stephanie Wells, retired Air Force major and NASA staff pilot who flew during Desert Storm; and Astronaut Eileen Collins, NASA's first woman shuttle pilot. The panel members' experience reflects the evolution and diversity of women's roles in flight activities over the past 50 years.

Ferree served as an engineering test pilot at Blackland Army Air Base in Waco, Texas. Following her WASP service, Ferree has been active in financial and academic arenas, as well as participating in several women's aviation groups.

Please see **PILOTS**, Page 4